

IN THE CLAIMS:

1-3. (Cancelled)

4. (Previously Presented) A method of producing a rubber product, which comprises adding a protease and one or more water-soluble polymers to a natural rubber latex, thereby subjecting the natural rubber latex to a deproteinization treatment, incorporating at least a vulcanizing agent into the latex, dipping a mold in the resulting compound latex, and vulcanizing and drying a rubber film formed on the mold, wherein said one or more water-soluble polymers have at least one hydrophilic functional group selected from the group consisting of a hydroxyl group, a carboxyl group, an amide group, an ester bond, and salts thereof, with a principal chain of the polymer having from 100 to 5,000,000 carbon atoms.

5. (Previously Presented) A method of producing a rubber product, which comprises adding a protease and one or more water-soluble polymers to a natural rubber latex, thereby subjecting the natural rubber latex to a deproteinization treatment, incorporating at least a heat sensitizer and a vulcanizing agent into the latex, dipping a mold in the resulting heat-sensitive coagulable compound latex, and vulcanizing and drying a rubber film formed on the mold,

wherein said one or more water-soluble polymers have at least one hydrophilic functional group selected from the group consisting of a hydroxyl group, a carboxyl group, an amide group, an ester bond, and salts thereof, with a principal chain of the polymer having from 100 to 5,000,000 carbon atoms.

6. (Original) The method of producing a rubber product according to claim 5, wherein the heat sensitizer is a water-soluble polymer type heat sensitizer.

7. (Original) The method of producing a rubber product according to claim 5, wherein the amount of the heat sensitizer is within a range from 0.1 to 10 parts by weight based on 100 parts by weight of the rubber solid content in the deproteinized latex.

8. (Original) The method of producing a rubber product according to claim 6, wherein the amount of the heat sensitizer is within a range from 0.1 to 10 parts by weight based on 100 parts by weight of the rubber solid content in the deproteinized latex.

9-16. (Cancelled)